Snake River Salmon Recovery Region

PHOTOS BY CHRIS DRIVDAHL

The Snake River Salmon Recovery Region is located in the southeastern corner of Washington. Rolling, semi-arid crop and pasture lands are flanked by the forested Blue Mountains to the south. The Columbia, Snake, Grande Ronde, Tucannon, and Walla Walla Rivers drain the recovery region. The Snake River is a major transportation corridor for many of the region's products, which are barged downstream to Columbia River ports.

The recovery region is sparsely populated, with residents scattered throughout the area in communities of less than 1,000 people or clustered in a few larger cities. The draft recovery plan was completed in June 2005 and posted in the Federal Register in March 2006. The plan covers portions of the middle Columbia steelhead, Snake River steelhead, fall/spring/summer Chinook salmon, and bull trout.

Key Facts

LISTED FISH

Steelhead (threatened)
Sockeye (endangered)[25]
Chinook (threatened)
Bull trout (threatened)

MAJOR FACTORS LIMITING RECOVERY

- Hydropower system mortality on Columbia River
- Impaired stream flows in tributaries
- Barriers to fish passage in tributaries
- Excessive sedimentation
- Degraded riparian habitat
- Degraded water quality and temperature
- Altered channel morphology
- Harvest

RECOVERY PLANNING STATUS

Draft recovery plan completed in June 2005 and posted in Federal Register in March 2006.

REGIONAL RECOVERY ORGANIZATION

Snake River Salmon Recovery Board.

FEDERALLY RECOGNIZED TRIBES

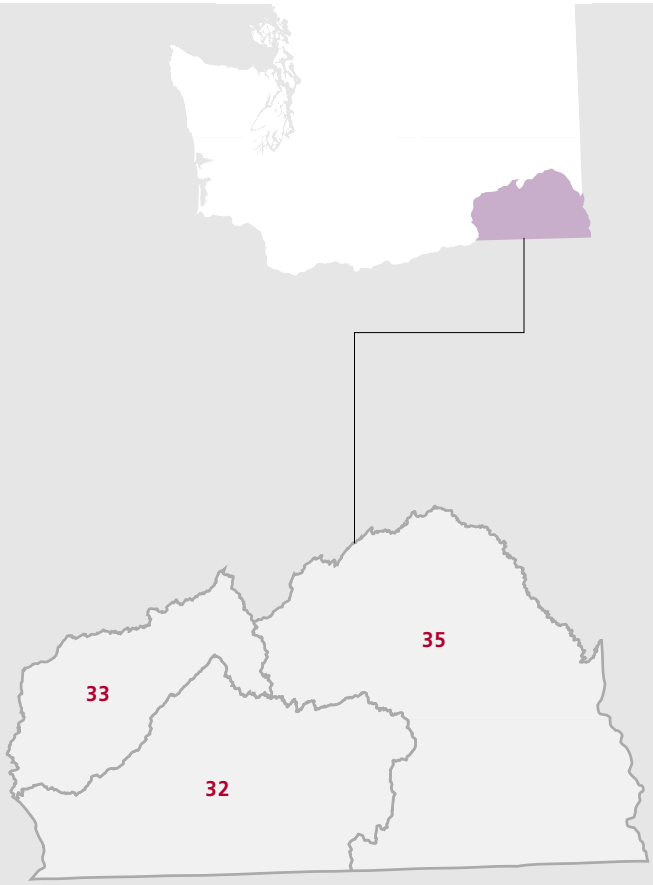
Nez Perce and Confederated Tribes of the Umatilla Reservation.

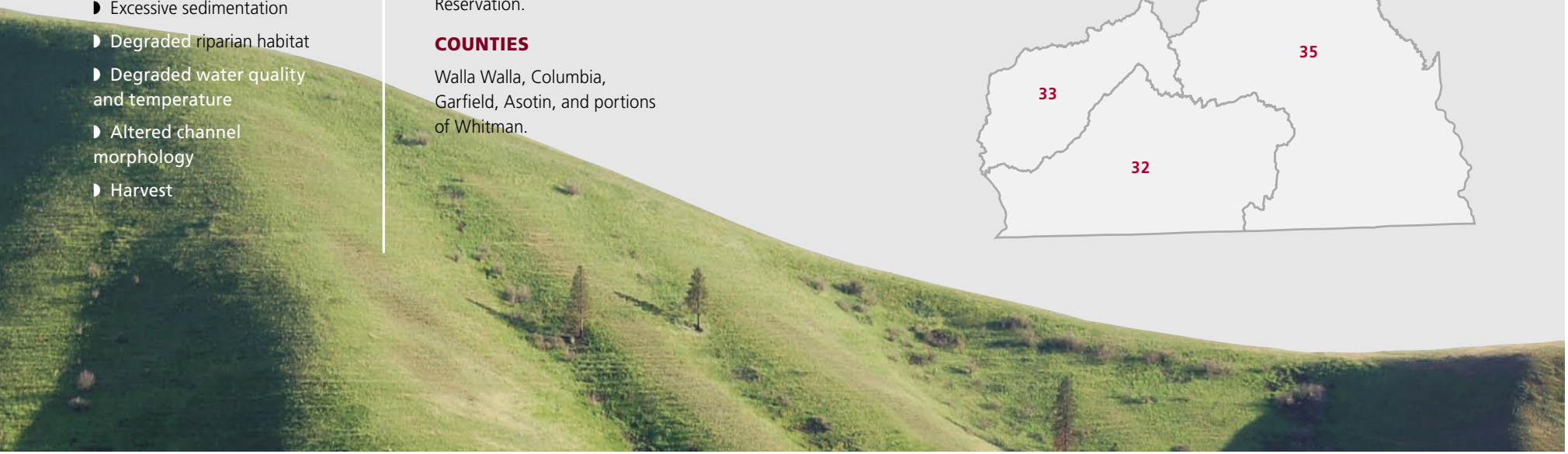
COUNTIES

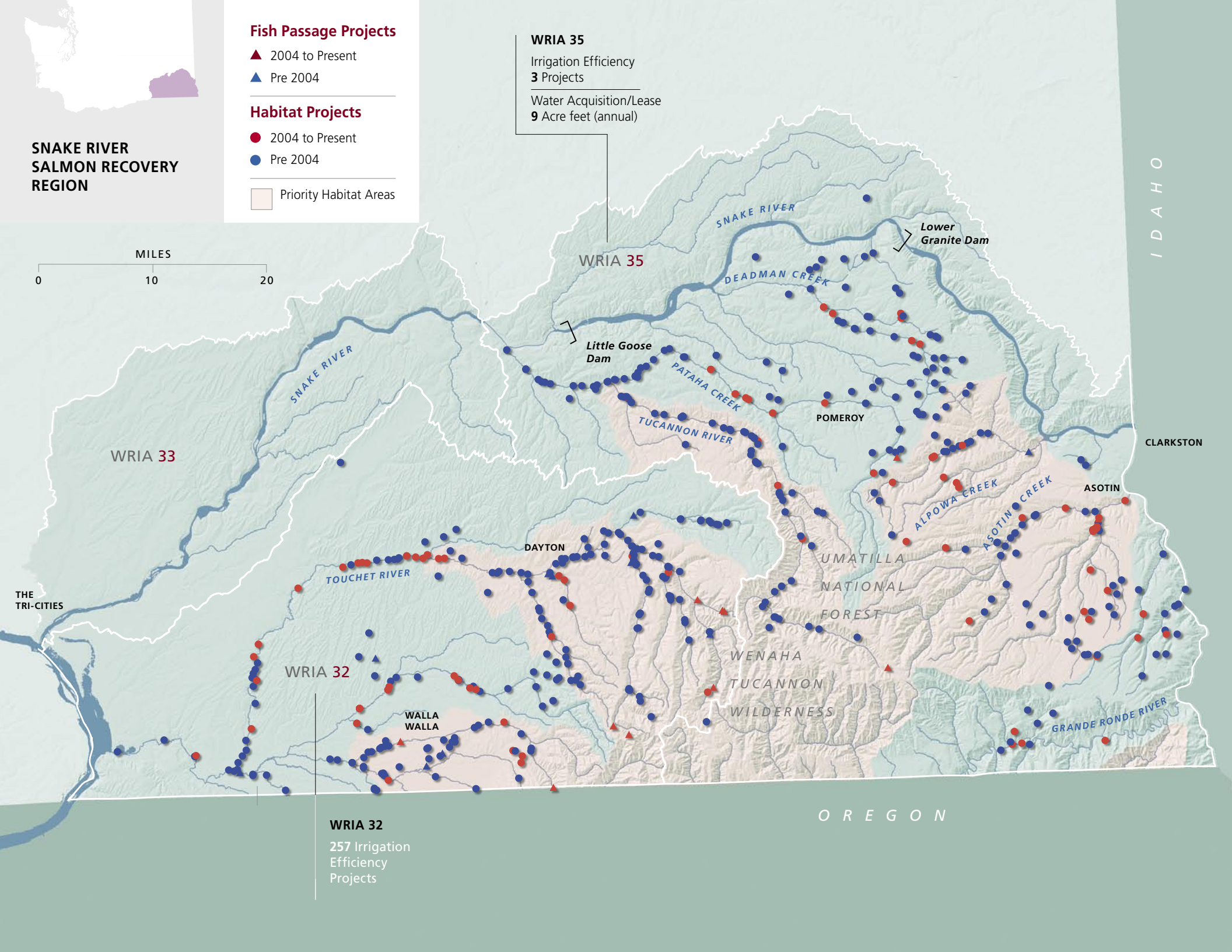
Walla Walla, Columbia, Garfield, Asotin, and portions of Whitman.

WATER RESOURCE INVENTORY AREAS (WRIAs)

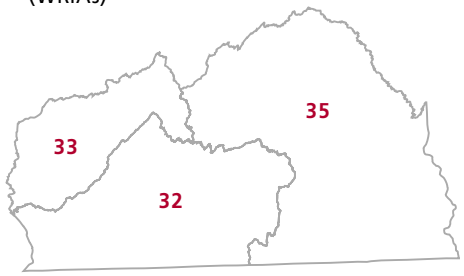
32 Walla Walla
33 Lower Snake
35 Middle Snake



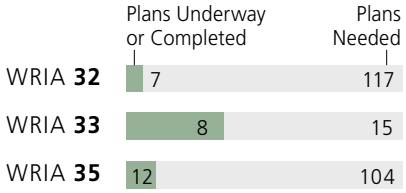



SNAKE RIVER SALMON RECOVERY REGION
Fish Passage Projects
2004 to Present
Pre 2004
Habitat Projects
2004 to Present
Pre 2004
Priority Habitat Areas
WRIA 35
Irrigation Efficiency
3 Projects
Water Acquisition/Lease
9 Acre feet (annual)
MILES
0
10
20
WRIA 35
WRIA 33
WRIA 32
SNAKE RIVER
Lower Granite Dam
Little Goose Dam
DEADMAN CREEK
PATAHA CREEK
TUCANNON RIVER
POMEROY
CLARKSTON
ASOTIN
ALPOWA CREEK
ASOTIN CREEK
DAYTON
TOUCHET RIVER
THE TRI-CITIES
WALLA WALLA
UMATILLA NATIONAL FOREST
WENAHA TUCANNON WILDERNESS
GRANDE RONDE RIVER
IDAHO
OREGON
WRIA 32
257 Irrigation Efficiency Projects

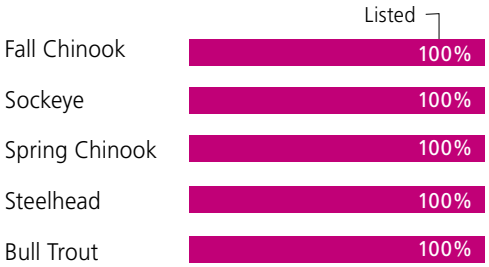
WATER RESOURCE INVENTORY AREAS (WRIAs)

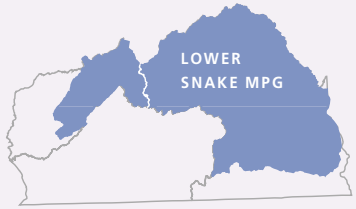


Watershed Cleanup Plans



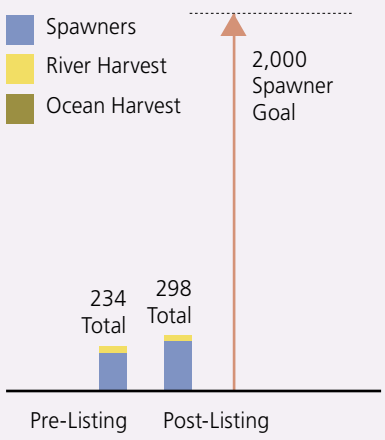
Fish Status



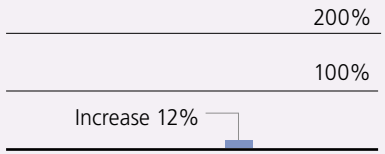


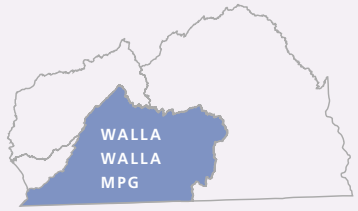
Snake River Steelhead Wild Adult Abundance Lower Snake MPG

ANNUAL AVERAGE



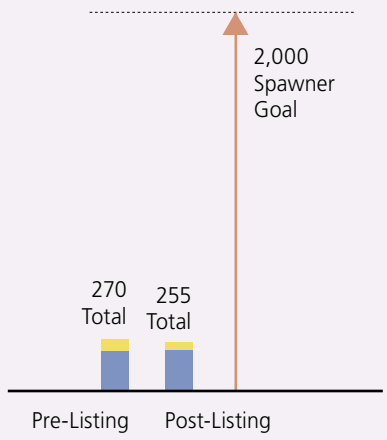
Steelhead Wild Juvenile Production[28] Since Listing





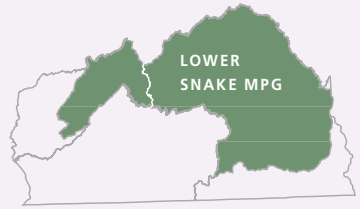
Mid-Columbia Steelhead Wild Adult Abundance Walla Walla MPG[26]

ANNUAL AVERAGE



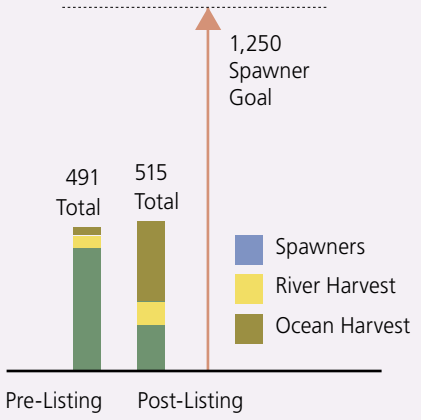
Steelhead Wild Juvenile Production Since Listing

Data Not Available

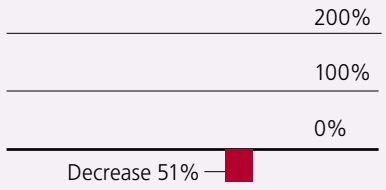


Spring Chinook Wild Adult Abundance Lower Snake MPG[27]

ANNUAL AVERAGE



Spring Chinook Wild Juvenile Production[28] Since Listing



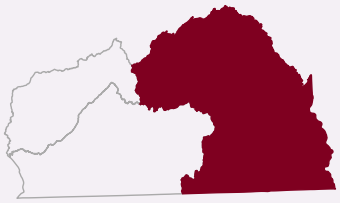
SNAKE RIVER SALMON RECOVERY REGION

MIDDLE SNAKE (TUCANNON) BASIN

WRIA 35

WATER RESOURCE INVENTORY AREA

Watershed Characterization
Middle Snake (Tucannon) Basin WRIA 35



The Middle Snake watershed is located in the extreme southeast corner of Washington, bordered by Oregon to the south and Idaho to the east. The basin drains approximately 2,250 square miles (1,440,000 acres) within the state. Elevation ranges from 6,500 feet to 650 feet above sea level, while precipitation ranges from over 40 inches per year at higher elevations to 7 inches per year along the Snake River. The watershed encompasses portions of Asotin, Whitman, Garfield, and Columbia Counties. Most of Asotin County's 20,551 people live in Asotin or Clarkston and neighboring communities.

Whitman County and Columbia County portions of the basin do not have major population centers, and the city of Pomeroy is the most populated area in Garfield County with 1,517 residents. Population growth has been slow. Private land comprises 1,711 square miles (76%) of the WRIA, while the federal government manages 436 square miles (19%), and the state of Washington manages 103 square miles (~5%). Primary surface water bodies include the Snake River, Tucannon River, Asotin Creek, and Pataha Creek. Little Goose and Lower Granite Dams impound the Snake River, backing water upstream for about 40 miles to the city of Asotin. From Asotin to Hells Canyon Dam, about 100 miles, the river is free-flowing.

About 43% of the land area has been converted to crop and livestock production, with grazing occurring on about 37% of the watershed. Non-irrigated row crops, primarily wheat, are found on roughly 37% of land in the watershed. Coniferous forests cover approximately 20%, while a mixture of shrubs and trees covers 7%. Recent wildfires have burned more than 100,000 acres of the WRIA, or nearly 7% of the total area.

SALMON RECOVERY FUNDING BOARD

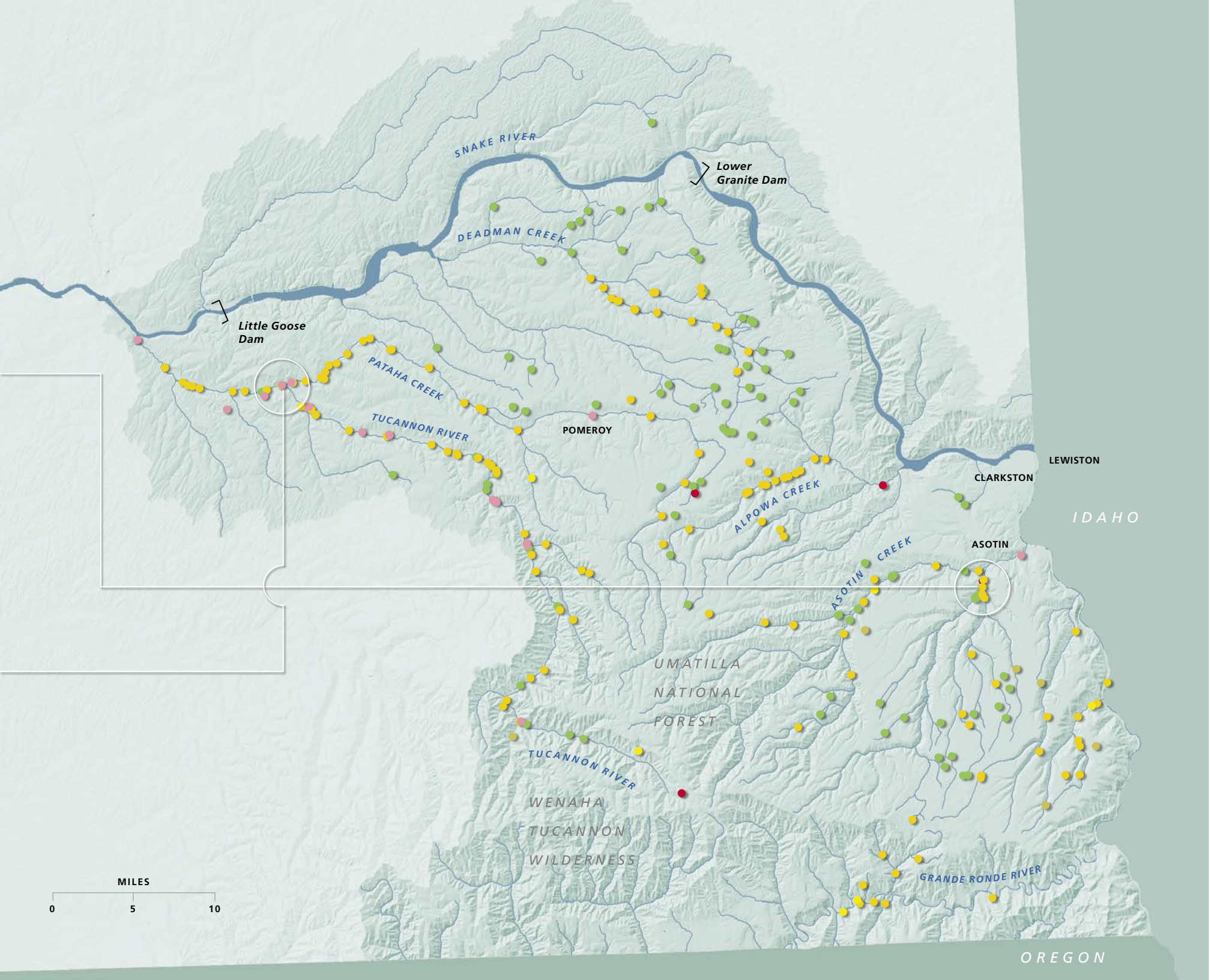
George Creek Instream and Riparian Projects

SNAKE RIVER SALMON RECOVERY BOARD

Tucannon River Diversion Screen Project

RESTORATION PROJECTS

- Fish Passage
- Riparian
- Instream Habitat
- Instream Flows
- Estuary
- Upland
- Miscellaneous


SNAKE RIVER
Lower Granite Dam
DEADMAN CREEK
Little Goose Dam
PATAHA CREEK
TUCANNON RIVER
POMEROY
LEWISTON
CLARKSTON
IDAHO
ALPOWA CREEK
ASOTIN
ASOTIN CREEK
UMATILLA NATIONAL FOREST
TUCANNON RIVER
WENAHA TUCANNON WILDERNESS
GRANDE RONDE RIVER
OREGON
MILES
0
5
10

SNAKE RIVER SALMON RECOVERY REGION

MIDDLE SNAKE (TUCANNON) BASIN

WRIA 35

WATER RESOURCE INVENTORY AREA

MIDDLE SNAKE (TUCANNON) BASIN WRIA 35 RECOVERY QUESTIONS

Are hydroelectric facilities operating in a "fish friendly" manner?

Indicator	Measured Results
FERC-licensed facilities	There are no FERC-licensed facilities in WRIA 35

Are streams accessible to wild salmon?

Indicator	Measured Results
Inventory of major blockages	Complete barriers: 3; Partial barriers: 13
Miles of anadromous waters inaccessible	Not available

Are listed populations abundant and productive?

Indicator	Measured Results
Run size achieved 5 year average pre- and post listing. Wild component of Major Population Group indicated.	Snake River Steelhead (Lower Snake MPG): Pre-listing 234; Post-listing 298
	Mid-Columbia Steelhead (Walla Walla MPG): Pre-listing 270; Post-listing 255
	Spring Chinook (Lower Snake MPG): Pre-listing 1,375; Post-listing 515
Juvenile production achieved (baseline mean)	Steelhead: 20,984 Fall Chinook: 7,529 Spring Chinook: 43,433

Is water clean enough to support wild salmon?

Indicator		Measured Results	
Water quality index parameters	Fecal coliform	15	15
	Dissolved oxygen	7	3
	pH	9	9
	Temperature	11	72

Stream segments meeting standard

Stream segments not meeting standard

Do rivers and streams have flows that support wild salmon?

Indicator	Measured Results
Instream flows set	Flow recommendations under negotiations
Percent of time flow met during fish critical period **August 1 to September 30**	Not available.

Does harvest management protect wild salmon?

Indicator		Measured Results
Wild spawners 5 year average pre- and post listing (MPG scale)	**Snake River Steelhead (Lower Snake MPG)**	Pre-listing 198 Post-listing 258 2,000 RECOVERY PLAN ESCAPEMENT GOAL
	Spring Chinook (Lower Snake MPG)	Pre-listing 418 Post-listing 281 750 RECOVERY PLAN ESCAPEMENT GOAL
	Mid-Columbia Steelhead (Walla Walla MPG)	Pre-listing 207 Post-listing 281 2,000 RECOVERY PLAN ESCAPEMENT GOAL
Percent of wild salmon run that is harvested 5 year average pre- and post listing (MPG scale)	**Snake River Steelhead**	Pre-listing **15%** Post-listing **13%**
	Mid-Columbia Steelhead	Pre-listing **23%** Post-listing **18%**
	Spring Chinook	Pre-listing **15%** Post-listing **17%**

Do hatchery practices meet the needs of wild salmon?

Indicator	Measured Results
Does a scientific evaluation of practices exist?	Recovery plan recommendations complete; Hatchery Scientific Review Group pending
If so, what actions have been accomplished?	3 Actions Implemented; 1 Ongoing